

submit that the Office did not adequately follow the MPEP and, therefore, the rejection is insupportable.

The Office, in applying the second paragraph of Form Paragraph 8.38, stated that the subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are **claiming common subject matter** (emphasis added), as follows: A method of forming an insulating film formed over a glass substrate. Applicants respectfully submit the Office appeared to merely rephrase the preamble of claim 1 of the present application without any further showing that the '138 patent and the instant application are claiming common subject matter that is required by the above-cited section of the MPEP.

In comparing claims 1-29 of the instant application and claims 1-27 of the '138 patent, Applicants cannot find claimed common subject matter. For example, claim 1 of the instant application recites a method of forming insulating film comprising silicon oxide formed over a glass substrate, wherein the insulating film includes halogen at a concentration of $5 \times 10^{20} \text{ cm}^{-3}$ or less and carbon at a concentration of $5 \times 10^{19} \text{ cm}^{-3}$ or less which are detected by second ion mass spectroscopy, while claim 20, for example, of the '138 patent recite a method of manufacturing a semiconductor device, wherein the monocrystal-like region or substantially monocrystal-like region contains substantially no grain boundary therein, contains hydrogen and/or halogen atoms for compensating a defect at a density of 1×10^{15} to $1 \times 10^{20} \text{ cm}^{-3}$ therein, also contains carbon and nitrogen atoms at a density of 1×10^{16} to $5 \times 10^{18} \text{ atoms cm}^{-3}$, and further contains oxygen atoms at a density of 1×10^{17} to $5 \times 10^{19} \text{ atoms cm}^{-3}$.

As can be seen in the above example, the '138 patent does not claim a concentration of halogen and/or hydrogen in an insulating film but, rather, in a crystalline silicon film or monocrystal-like region. Furthermore, the '138 patent does not claim the insulating film including a halogen at a concentration of $5 \times 10^{20} \text{ cm}^{-3}$ or less and a carbon at a concentration of $5 \times 10^{19} \text{ cm}^{-3}$ or less, as recited in claim 1.

In another example, although claim 23 of the '138 reference indicates forming a thermal oxide by thermal annealing of the crystalline silicon film in an oxidizing atmosphere containing halogen element and claim 26 of the '138 reference shows some gases for the oxidizing atmosphere with the halogen element, claims 23-27 of the '138 reference do not

recite the feature of halogen concentration and the carbon concentration in the insulating film comprising silicon oxide as recited in the presently claimed invention.

Other claims of the '138, in addition to claims 20 and 23 mentioned above, further lack common subject matter with the Applicants' pending claims. Applicants respectfully submit that no claim of the '138 reference teaches the claimed concentration of the halogen element and carbon in the insulating film. As Applicants cannot find common subject matter in the rest of the pending claims and claims 1-27 of the '138 patent, the Office is invited to show Applicants any common subject matter or any obvious variation between the instantly claimed invention and the claimed invention of the '138 patent.

Moreover, Applicants respectfully submit that the Office has cited *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968) indiscriminately without the approval of the Group Director, as required in the Board of Appeals' decision related to Application Serial No. 08/226,660. A copy of the decision will be provided to the Office, if necessary.

In view of the arguments set forth above, the judicially created doctrine of double patenting rejection of claims 1-29 is respectfully requested to be reconsidered and withdrawn.

Additionally, Applicants respectfully request that the Office not rely on the priority document application, JP 5-55236, which has a priority date of February 19, 1993. It does not appear that the priority document '236 provides support for the pending claims 1-29 of the present application under 35 U.S.C. § 112. The full translation of the priority document was submitted by Applicant in a parent application Serial No. 08/198,054 in response to an Office Action.

Applicants now appreciate that the priority application does not appear to provide complete support for the currently pending claims, particularly with regard to the upper limit of halogen. Further, the Japanese priority document does not disclose use of fluorine, as recited in claims 21-24, and 27. As a result, Applicants request that the instant Application be considered based only on its U.S. filing date of February 18, 1994.

CONCLUSION

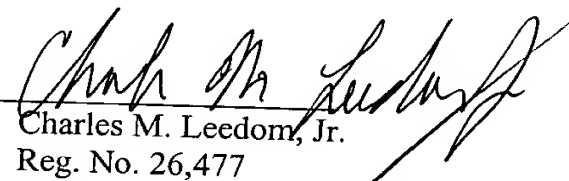
Having responded to all rejections set forth in the outstanding Final Office Action, it is submitted that claims 1-29 are now in condition for allowance. An early and favorable Notice of Allowance is respectfully solicited. In the event that the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the

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above claims, the Examiner is courteously requested to contact Applicants' undersigned representative.

Respectfully submitted,
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